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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,703	11/12/2003	Marlies Regiert	REGIERT ET AL-2	9249
25889	7590	03/09/2009	EXAMINER	
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			OLSON, ERIC	
			ART UNIT	PAPER NUMBER
			1623	
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			03/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/712,703	REGIERT ET AL.	
	Examiner	Art Unit	
	ERIC S. OLSON	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,9 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,9 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/15/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

This office action is a response to applicant's communication submitted December 12, 2008 wherein claims 19 and 20 are amended. This application claims priority to foreign application DE10253042.4, filed November 14, 2002.

Claims 1, 9, and 19-21 are pending in this application.

Claims 1, 9, and 19-21 as amended are examined on the merits herein.

The following rejections of record in the previous office action are maintained:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagu et al. (US patent 4438106, of record in previous action) in view of Koulbanis et al. (US patent 4393043, of record in previous action)

Wagu et al. discloses an inclusion compound of a polyunsaturated fatty acid guest molecule with a cyclodextrin. (column 2 lines 13-19) The resulting substance is colorless and odorless (column 2 lines 38-40) as opposed to uncomplexed polyunsaturated fatty acids such as those found in fish oil which have an unpleasant odor and quickly oxidize in air to peroxides and other decomposition products. (column 1 lines 41-59) In one example, an inclusion compound of ethyl docosahexaenoate in

Art Unit: 1623

alpha-cyclodextrin is prepared which contains 7.6% by weight of ethyl docosaheptaenoate included in the inclusion complex, (column 5 line 53 – column 6 line 9) which is a molar ratio of about 4:1 cyclodextrin:ethyl DHA. These complexes absorbed almost no oxygen compared to the free uncomplexed fatty acids, indicating that they were highly stable to air oxidation. (column 7 line 60 - column 8 line 22)

Wagu et al. does not disclose a cosmetic or dermatological composition comprising similar complexes of alpha-cyclodextrin with an omega-6 polyunsaturated fatty acid.

Koulbanis et. al. discloses the use of vitamin F for the preparation of cosmetics. (Column 1, Paragraph 1). Koulbanis et. al. discloses vitamin F as useful for the treatment of skin dryness. (Column 1, lines 27-30). Koulbanis et. al. further disclose that the use of vitamin F is limited by problems with oxidation. (Column 1, lines 30-35). Koulbanis further discloses several emulsions comprising vitamin F compounds and oil by mixing the ingredients. (Columns 5-6; Examples II-XII). Vitamin F typically includes polyunsaturated fatty acids including linoleic acid and arachidonic acid, both omega-6 fatty acids. (column 1 line 60 - column 2 line 41) Note that the preparation of a dispersion before the formation of an emulsion is considered a routine step within the capabilities of one skill in the art in the cosmetic art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to make a cosmetic or dermatological emulsion containing linoleic or arachidonic acid in a complex with 4 alpha-cyclodextrin molecules as described by Wagu et al. One of ordinary skill in the art would have been motivated to make this

Art Unit: 1623

composition because Wagu et al. discloses that 1:4 complexation of polyunsaturated fatty acids in alpha-cyclodextrin solves the problem of oxidation stability, said problem having been recognized by Koulbanis et al. One of ordinary skill in the art would reasonably have expected success because of the great improvement in stability described by Wagu et al. for various different polyunsaturated fatty acids.

Therefore the invention taken as a whole is *prima facie* obvious.

Response to Argument: Applicant's arguments, submitted December 12, 2008, with respect to the above ground of rejection have been fully considered and not found to be persuasive to remove the rejection. Applicant argues that Wagu et al. does not disclose an omeg-6- polyunsaturated fatty acid, because eicosapentaenoic acid and docosahexaenoic acid are omega-3 fatty acids. However, although Wagu et al. does not disclose complexation of the exact same fatty acids, one of ordinary skill in the art would have recognized that the problem of oxidation of omega-3 fatty acids and the problem of oxidation of omega-6 fatty acids are similar problems arising from the same chemical cause, namely the multiple double bonds in the alkene chains of the fatty acids that are susceptible to attack by oxygen. This decomposition is not the result of specific interactions that would discriminate between omega-6 and omega-3 fatty acids, but rather a nonspecific chemical reaction that would occur in any alkene-CH₂-alkene system. Therefore one of ordinary skill in the art would recognize that the complexation methods of Wagu et al. would also be useful for stabilizing other polyunsaturated fatty acids that are susceptible to oxidation, for example linoleic acid as described by Koulbanis et al.

Applicant further argues that Wagu et al. only discloses complexation of fatty acid esters, which are different from the fatty acids taught by Koulbanis et al. However, column 2 lines 15-20 of Wagu et al. disclose using either the free acids EPA and DHA, their alkali metal salts, or their alkyl esters. Therefore Wagu et al. is seen to in fact teach using the free fatty acids.

For these reasons the rejection is deemed proper and made **FINAL**.

Conclusion

No claims are allowed in this application. **THIS ACTION IS MADE FINAL.**

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC S. OLSON whose telephone number is (571)272-9051. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

Art Unit: 1623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on (571)272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric S Olson/
Examiner, Art Unit 1623
3/3/2009

/Shaojia Anna Jiang/
Supervisory Patent Examiner, Art Unit 1623